Washington State Department of Health

ENVIRONMENTAL HEALTH

March, 2002

Fact Sheet

Hamilton/Labree Road Groundwater Contamination
Chehalis, Lewis County, Washington

Health Assessment Completed

The Washington State Department of Health (DOH) has prepared a public health assessment of the Hamilton/Labree Roads groundwater contamination site, located near Chehalis, Washington. The health assessment was conducted to evaluate past, current, and potential future health hazards posed by contaminants detected at the site. This fact sheet summarizes the findings of the health assessment.

Site Background

The site is located 3 miles southwest of Chehalis, Washington, near the intersection of Hamilton and Labree Roads. In 1993, DOH testing revealed that six drinking water wells in this area were contaminated with tetrachloroethylene (perchloroethylene, or PCE) at levels above federal drinking water standards. Although PCE levels in several of the drinking water wells were quite elevated, levels measured in one of the wells was much higher than the others. Affected well owners were informed of the contamination, and were advised to obtain alternate sources of water for drinking and cooking purposes.

Since 1993, other drinking water wells considered to be at risk of contamination have been tested. Bottled drinking water is being provided to some residences and businesses, and a water treatment system was installed at one residence. Other affected residences and businesses have stopped using their wells, or are supplying their own bottled water. A new water line will be installed in summer 2002 to provide a permanent source of clean water to affected properties.

One contamination source is near the intersection of Hamilton and Labree Roads and another is along Hamilton road, across from the United Rentals property. In the summer of 2000, the Environmental Protection Agency (EPA added the site to the National Priorities List. EPA will continue to look for more contamination and then propose a plan to clean it up.

Contaminants of Concern

The primary contaminant of concern at the site is PCE, also known as perchloroethylene or tetrachloroethylene. This chemical is most commonly used to dry-clean clothes. In the past, PCE was also found in paints and widely used as a cleaning solvent. Other chemicals similar to PCE have been detected in groundwater and drinking water, but at much lower levels, and much less frequently.

PCE in drinking water at the levels found in some wells near the Hamilton/Labree Road site is a health concern if people are exposed over many years. In addition to drinking, breathing PCE in indoor air is also of concern because it easily evaporates from water. PCE can move into indoor air from normal household water use such as showering and directly from shallow groundwater.

While health effects are unlikely at the levels found in most wells near Hamilton Road, long-tem exposure to PCE could cause harm to the liver and kidneys. PCE has been classified by as

a probable human carcinogen because it can cause liver cancer in animals at doses very much higher than those estimated for residents exposed in the Hamilton/Labree Road area. Exposure of the developing fetus to PCE is also of concern.

Conclusions

No current public health hazard exists for people exposed to contaminants in drinking water in the Hamilton/Labree Road area since affected residents and businesses began using bottled water, switched wells, or received water treatment. Wells along Rice and Bishop Road do not contain contaminants at levels of health concern.

Past exposure to contaminants in some wells in this area did pose a health risk, particularly at one residence with very high levels of PCE in their well.

Levels of PCE detected in soil samples and several chemicals detected in Berwick Creek surface water samples do not pose a public health hazard.

Evaporation of PCE and other similar chemicals from tap water and groundwater into indoor air could result in exposure to some residents. Whether such exposure might reach level of concern, or is occurring at all, needs to be investigated.

Recommendations

1. Residences and businesses that use alternate water sources should continue doing so until contaminant levels drop, or until a safe, permanent water supply is available.
2. Indoor air sampling should be conducted at one Hamilton/Labree residence and at two businesses along Hamilton Road where VOCs in groundwater are elevated and could move into indoor air.
3. DOH supports EPA's proposal to offer affected residents and businesses within the Hamilton/Labree Road site with a permanent source of clean, safe water.
4. Appropriate precautions/restrictions should be placed on the construction of new wells within the Hamilton/Labree Road site. Previous recommendations by DOH and Ecology to restrict well drilling in the area of groundwater contamination should be followed.

For information or a copy of the health assessment, call or e-mail:

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